

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for detecting a protein having a disulfide bond, comprising: protecting by chemically modifying a free SH group of a protein in a sample to be tested so as to prevent from detection the initial free SH groups of the protein in a later detection step; cleaving a disulfide bond of the free SH group-protected protein to expose SH groups; and detecting the exposed SH groups.

2. (Original) The method of claim 1, wherein the exposed SH groups are detected by reacting the exposed SH groups with an SH group-labeling substance, and detecting the labeled SH groups.

3. (Original) The method of claim 2, wherein the protein in a sample to be tested is separated by two-dimensional electrophoresis before detection of the labeled SH groups.

4. (Previously Presented) The method of claim 2, wherein chemical modification is carried out by alkylation with iodoacetamide and the SH group-labeling substance is monobromobimane.

5. (Currently Amended) A method for ~~detecting~~ screening for an allergen protein, comprising: protecting by chemically modifying a free SH group of a protein in a sample to be tested so as to prevent from detection the initial free SH groups of the protein in a later detection step; cleaving a disulfide bond of the free SH group-protected protein to expose SH groups; ~~and~~ detecting the exposed SH groups; isolating proteins having the detected SH groups; and characterizing the proteins to identify an allergen protein among them.

6. (Original) The method of claim 5, wherein the exposed SH groups are detected by reacting the exposed SH groups with an SH group-labeling substance, and detecting the labeled SH groups.

7. (Original) The method of claim 6, wherein the protein in a sample to be tested is separated by two-dimensional electrophoresis before detection of the labeled SH groups.

8. (Previously Presented) The method of claim 6, wherein chemical modification is carried out by alkylation with iodoacetamide and the SH group-labeling substance is monobromobimane.

9. (Previously Presented) The method of claim 5, wherein the sample to be tested is a protein extract from seeds of gramineous plants, pollens, mites, or house dust.

10. (Original) A kit for detecting a protein having a disulfide bond or an allergen protein, containing an SH group-protecting agent and an SH group-detecting substance.

11. (Original) A kit for detecting a protein having a disulfide bond or an allergen protein, containing iodoacetamide and monobromobimane.

12. (Previously Presented) The kit of claim 10, further containing a reducing agent.

13. (Previously Presented) The method of claim 3, wherein chemical modification is carried out by alkylation with iodoacetamide and the SH group-labeling substance is monobromobimane.

14. (Previously Presented) The method of claim 6, wherein the sample to be tested is a protein extract from seeds of gramineous plants, pollens, mites, or house dust.

15. (Previously Presented) The method of claim 7, wherein chemical modification is carried out by alkylation with iodoacetamide and the SH group-labeling substance is monobromobimane.

16. (Previously Presented) The method of claim 7, wherein the sample to be tested is a protein extract from seeds of gramineous plants, pollens, mites, or house dust.

17. (Previously Presented) The method of claim 8, wherein the sample to be tested is a protein extract from seeds of gramineous plants, pollens, mites, or house dust.

18. (Previously Presented) The kit of claim 11, further containing a reducing agent.